



## King's Research Portal

DOI:

[10.1016/j.drugalcdep.2004.07.011](https://doi.org/10.1016/j.drugalcdep.2004.07.011)

*Document Version*

Peer reviewed version

[Link to publication record in King's Research Portal](#)

*Citation for published version (APA):*

Williams, S., Brown, A., Patton, R., Crawford, M. J., & Touquet, R. (2005). The half-life of the 'teachable moment' for alcohol misusing patients in the emergency department. *Drug and alcohol dependence*, 77(2), 205-208.  
<https://doi.org/10.1016/j.drugalcdep.2004.07.011>

### **Citing this paper**

Please note that where the full-text provided on King's Research Portal is the Author Accepted Manuscript or Post-Print version this may differ from the final Published version. If citing, it is advised that you check and use the publisher's definitive version for pagination, volume/issue, and date of publication details. And where the final published version is provided on the Research Portal, if citing you are again advised to check the publisher's website for any subsequent corrections.

### **General rights**

Copyright and moral rights for the publications made accessible in the Research Portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognize and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the Research Portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the Research Portal

### **Take down policy**

If you believe that this document breaches copyright please contact [librarypure@kcl.ac.uk](mailto:librarypure@kcl.ac.uk) providing details, and we will remove access to the work immediately and investigate your claim.

## The half-life of the '*teachable moment*' for alcohol misusing patients in the emergency department

Sean Williams <sup>a</sup>, Adrian Brown <sup>b</sup>, Robert Patton <sup>c</sup>,  
Michael J. Crawford <sup>c</sup>, Robin Touquet <sup>a,\*</sup>

<sup>a</sup> Department of Accident & Emergency Medicine, St Mary's Hospital, Praed Street, London W2 1NY.

<sup>b</sup> Central and North West Thames Mental Health Trust, Paterson Centre, 20, South Wharf Road, London W2 1PD.

<sup>c</sup> Department of Psychological Medicine, Faculty of Medicine Imperial College London, Paterson Centre, 20, South Wharf Road, London W2 1PD.

\*Corresponding author. Tel.: +44 (0)20 7886.1200;  
Fax: +44 (0)20 7886.6366  
E-mail address: robin.touquet@st-marys.nhs.uk (R.Touquet)

---

### Abstract

**Background:** To determine whether the length of time between alcohol-related attendance in the Emergency Department (ED) and follow up appointment with an Alcohol Health Worker (AHW) alters attendance rate at the AHW clinic. **Methods:** We examined paper and computerized records made by AHWs over a 4-year period, collecting data on the length of time between identification of alcohol misuse and the appointment with the AHW, and whether the appointment was kept. **Results:** There is an inverse relationship between the length of time between identification of alcohol misuse and AHW appointment and the subsequent likelihood of keeping that appointment. **Conclusions:** To maximise attendance rates at AHW clinics, the delay between the identification and intervention for alcohol misusing patients must be kept to a minimum, preferably giving an appointment on the same day as the attendance in the ED.

**Key Words:** Alcohol misuse; emergency departments; screening; brief intervention; teachable moment

## **1. Introduction**

Excessive alcohol consumption has well documented adverse effects on health, and is commonly associated with presentation to Emergency Departments (EDs) (Royal College of Physicians, 2001; Hungerford & Pollock, 2002; Cabinet Office, Prime Minister's Strategy Unit 2004).

Initial detection of alcohol misuse followed by Brief Intervention (BI) in the ED has been shown to be effective in reducing alcohol intake and lowering levels of ED reattendance (D'Onofrio et al., 1998a,b; Gentilello et al., 1999; Monti et al., 1999 Longabaugh et al., 2001); however the initial detection and subsequent BI was carried out by research workers, as opposed to by ED staff themselves. Practical problems in carrying out opportunistic screening in EDs (Peters et al., 1998) can be mitigated by audit, education and feed-back (Huntley et al., 2001), and by the use of a robust pragmatic focused screening tool, e.g. the Paddington Alcohol Test (PAT), used by ED staff themselves (Patton et al., 2004a). Other brief questionnaires designed for use in EDs include the FAST (Hodgson et al., 2003) and RAPS4 (Cherpitel et al., 2000); however, their use was by research workers and has not been combined with reviewing attendance rates for subsequent BI.

Since 1994 we in the ED of St. Mary's Hospital, London have used the PAT (Smith et al., 1996, Huntley et al., 2001; Patton et al., 2004a,b) to screen patients for hazardous levels of alcohol misuse. Patients who screen positive are told gently that they are drinking alcohol at a level that may be harmful to their health, and are offered an appointment with an Alcohol Health Worker (AHW) (Patton et al., 2003). Of those who keep the appointment, our pilot data showed that two-thirds reported reducing their level of alcohol consumption (Wright et al., 1998), the AHW attending daily and being routinely involved in education and feed-back. However, the issue of timing of

BI following attendance at the ED and its effect on attendance rate appears not to have been examined previously.

We postulated: (i) that the likelihood of keeping the appointment with the AHW would relate inversely to the delay between the initial ED consultation and the appointment date provided; (ii) that less frequent AHW clinics would result in a lower attendance rate; (iii) that those patients requesting a specific appointment date represent a self-selecting group more likely to attend than those who simply accept the next available appointment.

This is the first report in the literature that addresses the specific issue of the advantages of prompt follow-up on the 'teachable moment' of initial ED attendance with subsequent BI, and shows the consequences of delay.

## **2. Methods**

We collected data on all patients who accepted an appointment to see the AHW between 1 January 1998 and 31 December 2001. We recorded the date of the appointment, and whether the patient attended or not (as recorded by the AHW). We identified the ED attendance date on which the AHW appointment was made for each of these patients, from the department computerized record system. We completed missing data wherever possible, from various other sources, including formal and informal computer records kept by AHWs. We also recorded if the appointment offered to the patient was on the next available appointment date or if it was specifically arranged as a delayed appointment.

The patients screened are not a random sample of ED attendances, but a specific group of patients at high risk of screening positive for hazardous drinking, as identified by presenting complaint. All of patients identified as in this 'high risk'

group were eligible for screening by the ED staff, and this was actively encouraged with audit, education and feed-back. However, due to incomplete deployment of the PAT by the front line ED staff, not all of those eligible for screening were screened. In a published audit of the PAT screening technique (Huntley et al., 2001), between 23% and 49% of total conscious adult attendances were screened for the top ten ED presentations associated with alcohol misuse. The proportion of patients screening positive varied between 3 and 15% of the total number screened.

Between 8% and 18% of patients screened accept the appointment with the AHW, depending on timings of the audit cycle (Huntley et al., 2001). Ultimately, a total of 0.8% of the total ED attendances (adults + children) screened 'PAT positive' and accepted an appointment.

We calculated the delay in days from initial presentation to the ED to the date of the appointment with the AHW. Until March 1999, an AHW was available to see patients each weekday morning. Thereafter due to service reorganization, AHWs employed by our local Mental Health Trust, were available only on three weekday mornings.

### **3. Results**

A total of 1,792 patients had booked clinic appointments over the 4-year study period; complete data were available for 90.29%. The overall attendance rate was 34.7%. Factors affecting the rate of attendance are presented in table 1. The impact on attendance of increasing the delay between the offer of the appointment and the date of the appointment is illustrated in figure 1.

Levels of attendance were higher when the appointment with the AHW was on the same day as the offer of an appointment in the AED ( $\chi^2=50.498$ ,  $p<0.0001$ ) and when the patient specifically requested a particular date for the appointment rather than

accepting the next available slot ( $\chi^2=9.681$ ,  $p<0.002$ ). Levels of attendance were also higher in the period before March 1<sup>st</sup>, 1999 when the AHW clinics were held each weekday compared to after this date when clinics were held three times a week ( $\chi^2=6.053$ ,  $p<0.014$ ).

#### **4. Discussion**

Attendance at the ED is unexpected and is usually due to an unpleasant event. The patient's agenda – their presenting complaint – must be attended to first, in order to gain confidence and empathy. The PAT is then applied in a non-judgemental appropriate manner enabling selective focused screening for alcohol misuse. The appreciation of the link between this unpleasantness and attendance creates the 'Teachable Moment' for opportunistic intervention: the acceptance by the patient of the offer of an appointment with the AHW. The patient has to appreciate first that they have a problem – as witnessed by their attendance at the ED. Secondly, the patient has to wish to alter their own drinking habits – facilitated by their wish to avoid re-attendance at the ED. After the patient has left the ED, the unpleasant memory of the initiating unpleasant attendance at the ED will fade. Therefore, the patient's volition to re-attend to see the AHW fades too. This problem has not been delineated before, nor highlighted as a focus of future research in the USA (Hungerford et al., 2000; D'Onofrio & Degutis LC, 2002; Hungerford & Pollok, 2003) or in mainland Europe (Daeppen J-B, 2003).

Those patients requesting a specifically delayed appointment date have a higher attendance rate than those who do not (when excluding those who attend on day 0 and day 1 as these automatically have taken the next available appointment), possibly indicating that these patients are a self-selecting group with increased motivation to

attend. These patients should be considered as a separate group: they represent only about 23% of total patients in our sample.

We demonstrate that the rate of attendance at the AHW clinic decreases steadily in the group of patients who accept the next available appointment as the delay in the appointment increases from 0 days (i.e. same calendar day appointment) to day 5. This group represents 77% of total number of appointments made. This decrease visibly demonstrates a 'half-life' like effect. As the attendance rate dropped from 65% (same day) to 28% (day 2), the 'half-life' of the teachable moment is 2 days, i.e. at 2 days the attendance rate has halved. Hence the importance of the same day or next day appointment with the AHW. This impacts on the provision of service and supports the Royal College of Physicians report (Alcohol – can the NHS afford it? 2001) that recommends that each acute hospital trust have “one or more dedicated alcohol health workers employed by and answerable to the acute trust.”

We suggest there are numerous points of contact with hospital services, in addition to the ED, that afford 'teachable moments' for alcohol misusing patients such as maxillo-facial units (Smith et al., 2003), sexually transmitted disease clinics and fracture clinics. All of these now warrant further study in different health care systems.

## **Acknowledgements**

This study was partially supported by a grant from the AERC (Alcohol Education and Research Council). We are grateful to all of our ED and AHW staff for their work, and especially to our Senior House Officer Teams 24-31.

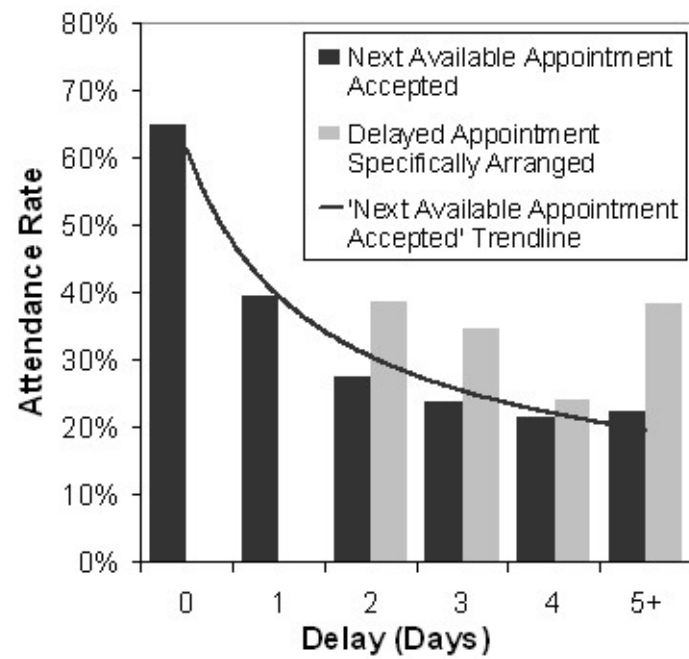
DRAFT



Table 1  
Factors affecting attendance at AHW Clinic

Variable		Attended N (%)	Did Not Attend N (%)	Difference in proportion who attended (statistical significance)
Delay between offer of appointment and appointment date	0 days	75 (65)	40 (34)	33% (p<0.0001)
	>0 days	488 (32)	1015 (68)	
Whether patient requested a delayed appointment	Next available	303 (29)	732 (71)	16% (p<0.002)
	Delayed	260 (45)	323 (55)	
Frequency with which clinics were held	5 times a week	199 (39)	310 (61)	6% (p<0.014)
	3 times a week	364 (33)	745 (66)	

Fig. 1. Percentage of patients attending AHW follow-up appointment showing both patients who accept the next available appointment & those who specifically arrange a delayed appointment



## References

- Cabinet Office, Prime Minister's Strategy Unit, U.K., 2004. Alcohol Harm Reduction Strategy for England.
- Cherpitel, C.J., 2000. A brief screening instrument for problem drinking in the emergency room: The RAPS4. *J. Stud. Alcohol* 61, 447-449.
- Daeppen, J-B., 2003. Screening and brief alcohol interventions in trauma centers. *Swiss Med. Wkly.* 133, 495-500
- D'Onofrio, G., Bernstein, E., Bernstein, J., Woolard, R.H., Brewer, P.A., Craig, S.A., Zink BJ 1998a. Patients with alcohol problems in the emergency department, part1: improving detection. *Acad. Emerg. Med.* 5, 1200-1209.
- D'Onofrio, G., Bernstein, E., Bernstein, J., Woolard, R.H., Brewer, P.A., Craig, S.A., Zink, B.J., 1998b. Patients with alcohol problems in the emergency department, part 2: intervention and referral. *Acad. Emerg. Med.* 5, 1210-1217
- D'Onofrio, G., Degutis, L.C., 2002. Preventive care in the emergency department: screening and brief intervention for alcohol problems in the emergency department: a systematic review. *Acad. Emerg. Med.* 9, 627-638
- Gentilello, L.M., Rivara, F.P., Donovan, D.M., Jurkovich, G.J., Daranciang, E., Dunn, C.W., Villaveces, A., Copass, M., Ries, R.R., 1999. Alcohol interventions in a trauma center as a means of reducing the risk of trauma recurrence. *Ann. Surg.* 230, 473-483
- Hodgson, R., Abbasi, J.B., Hodgson, R.C., Waller, S., Thom, B., Newcombe, R.G., 2003. Fast screening for alcohol misuse. *Addict. Behav.* 18, 99-104

- Hungerford, D.W., Pollock, D.A., (Eds.) 2002. Alcohol problems among emergency department patients. Proceedings of a conference on Identification and intervention, March 19-21, 2001, Arlington, Virginia. National Center for Injury Prevention and Control,
- Hungerford, D.W., Pollock, D.A., 2003 Emergency department services for patients with alcohol problems: research directions. *Acad. Emerg. Med.* 10, 79-84.
- Hungerford, D.W., Pollock, D.A., Todd, K.H., 2000. Acceptability of Emergency Department-based screening and brief intervention for alcohol problems. *Acad. Emerg. Med.* 7, 1383-1392
- Huntley, J.S., Blain, C., Hood, S., Touquet, R., 2001. Improving detection of alcohol misuse in patients presenting to an accident and emergency department. *Emerg. Med. J.* 18, 99-104.
- Longabaugh, R., Woolard, R.F., Nirenberg, T.D., Minugh, A.P., Becker, B., Clifford, P.R., Carty, K., Sparadeo, F., Gogineni, A., 2001. Evaluating the effects on a brief motivational intervention for injured drinkers in the emergency department. *J. Stud. Alcohol* 62, 806-816.
- Monti, P.M., Spirito, A., Myers, M., Colby, S.M., Barnett, N.P., Rohsenow, D.J., Woolard, R., Lewander, W., 1999. Brief intervention for harm reduction with alcohol-positive older adolescents in a hospital emergency department. *J. Consult. Clin. Psychol.* 67, 989-994.
- Patton, R., Crawford, M.J., Touquet, R., 2003. Impact of health consequences feedback on patients acceptance of advice about alcohol consumption. *Emerg. Med. J.* 20, 451-2.
- Patton, R., Hilton, C., Crawford, M.J., Touquet, R., 2004a. The Paddington Alcohol Test: a short report. *Alcohol Alcohol.* 39, 1-3.
- Patton, R., Crawford, M.J., Touquet, R., 2004b. Hazardous drinkers in the accident and emergency department – who accepts advice? *Emerg. Med. J.* 21, 491-492.

Peters, J., Brooker, C., McCabe, C., Short, N., 1998. Problems encountered with opportunistic screening for alcohol related problems in patients attending an accident and emergency department. *Addiction* 93, 589-594.

Royal College of Physicians. 2001. Alcohol - can the NHS afford it? RCP, London.

Smith, S.G.T., Touquet, R., Wright, S., Das Gupta, N., 1996. Detection of alcohol misusing patients in accident and emergency departments: the Paddington Alcohol Test (PAT). *J. Accid. Emerg. Med.* 13, 308-12.

Smith, A.J., Hodgson, R., Bridgman, K., Shepherd, J.P., 2003. A randomised controlled trial of a brief intervention after alcohol-related facial injury. *Addiction*. 98, 43-52.

Wright, S., Moran, L., Meyrick, M., O'Connor, R., Touquet, R., 1998. Intervention by an alcohol health worker in an accident and emergency department. *Alcohol & Alcohol*. 33, 651-6.